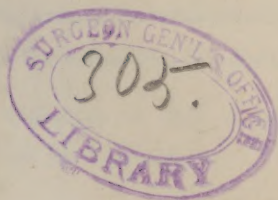
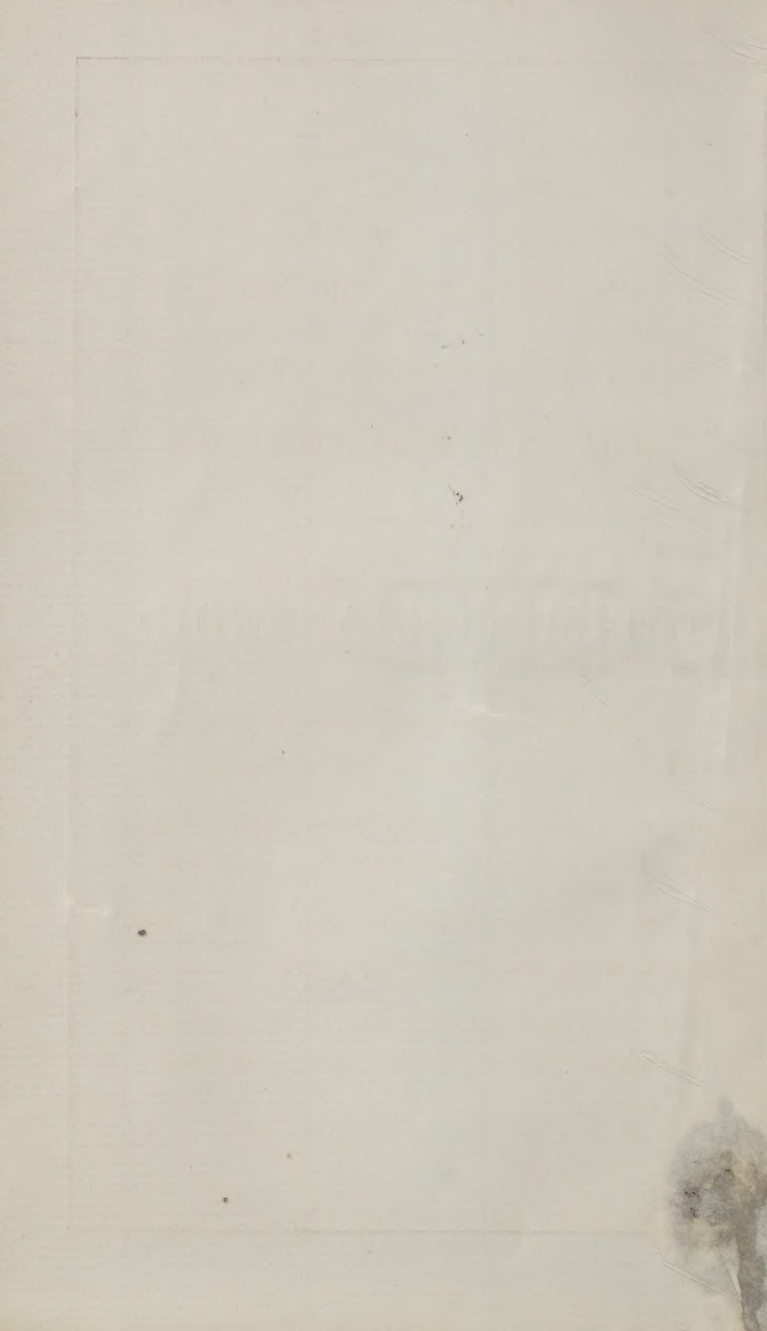


*With Compts from
W.R.*

TABLE FOR ANEROID.





DETERMINATION OF HEIGHTS

BY MEANS OF THE

COMPENSATED ANEROID.

THE ANEROID READINGS are taken both above and below ; and likewise the temperatures of the Air, in the shade, in degrees Fahrenheit.

Take the difference between the numbers of Feet which in this Table correspond to the Aneroid Readings.

Subtract 100 from the sum of the temperatures, paying attention to the sign of the remainder, or correction.

Then multiply the difference in Feet already found by 1000 \pm the correction for Temperature.

Cut off the last three integer figures of the product, and there remains the true difference of Height in Feet.

DETERMINATION OF HEIGHTS

<i>Bar.</i>	<i>Feet.</i>	<i>D. per '01.</i>	<i>Bar.</i>	<i>Feet.</i>	<i>D. per '01.</i>
25.	5863	— 11.0	26.	4794	— 10.4
'05	5808	— 11.0	'05	4741	— 10.6
'10	5754	— 10.8	'10	4689	— 10.4
'15	5700	— 10.8	'15	4637	— 10.4
'20	5646	— 10.8	'20	4585	— 10.4
'25	5592	— 10.8	'25	4533	— 10.4
'30	5538	— 10.8	'30	4481	— 10.4
'35	5484	— 10.8	'35	4429	— 10.4
'40	5430	— 10.8	'40	4377	— 10.4
'45	5376	— 10.8	'45	4326	— 10.2
'50	5323	— 10.6	'50	4275	— 10.2
'55	5269	— 10.8	'55	4223	— 10.4
'60	5216	— 10.6	'60	4172	— 10.2
'65	5163	— 10.6	'65	4121	— 10.2
'70	5110	— 10.6	'70	4070	— 10.2
'75	5057	— 10.6	'75	4019	— 10.2
'80	5004	— 10.6	'80	3968	— 10.2
'85	4951	— 10.6	'85	3917	— 10.2
'90	4898	— 10.6	'90	3866	— 10.2
'95	4846	— 10.4	'95	3815	— 10.2
26.	4794	— 10.4	27.	3765	— 10.0

<i>Bar.</i>	<i>Feet.</i>	<i>D. per '01.</i>	<i>Bar.</i>	<i>Feet.</i>	<i>D. per '01.</i>
27.	3765	— 10.0	28.	2774	— 9.8
.05	3714	— 10.2	.05	2725	— 9.8
.10	3664	— 10.0	.10	2676	— 9.8
.15	3614	— 10.0	.15	2628	— 9.6
.20	3564	— 10.0	.20	2580	— 9.6
.25	3514	— 10.0	.25	2532	— 9.6
.30	3464	— 10.0	.30	2484	— 9.6
.35	3414	— 10.0	.35	2436	— 9.6
.40	3364	— 10.0	.40	2388	— 9.6
.45	3314	— 10.0	.45	2340	— 9.6
.50	3265	— 9.8	.50	2292	— 9.6
.55	3215	— 10.0	.55	2244	— 9.6
.60	3166	— 9.8	.60	2196	— 9.6
.65	3117	— 9.8	.65	2148	— 9.6
.70	3068	— 9.8	.70	2101	— 9.4
.75	3019	— 9.8	.75	2054	— 9.4
.80	2970	— 9.8	.80	2006	— 9.6
.85	2921	— 9.8	.85	1959	— 9.4
.90	2872	— 9.8	.90	1912	— 9.4
.95	2823	— 9.8	.95	1865	— 9.4
28.	2774	— 9.8	29.	1818	— 9.4

<i>Bar.</i>	<i>Feet.</i>	<i>D. per '01.</i>	<i>Bar.</i>	<i>Feet.</i>	<i>D. per '01.</i>
29.	1818	—9.4	30.	894	—9.0
.05	1771	—9.4	.05	848	—9.2
.10	1724	—9.4	.10	802	—9.2
.15	1677	—9.4	.15	757	—9.0
.20	1630	—9.4	.20	712	—9.0
.25	1584	—9.2	.25	667	—9.0
.30	1537	—9.4	.30	621	—9.2
.35	1490	—9.4	.35	576	—9.0
.40	1444	—9.2	.40	531	—9.0
.45	1398	—9.2	.45	487	—8.8
.50	1352	—9.2	.50	443	—8.8
.55	1306	—9.2	.55	398	—9.0
.60	1260	—9.2	.60	353	—9.0
.65	1214	—9.2	.65	309	—8.8
.70	1168	—9.2	.70	265	—8.8
.75	1122	—9.2	.75	221	—8.8
.80	1076	—9.2	.80	176	—9.0
.85	1030	—9.2	.85	132	—8.8
.90	984	—9.2	.90	88	—8.8
.95	939	—9.0	.95	44	—8.8
30.	894	—9.0	31.	0	—8.8

E X A M P L E.

On the afternoon of 1st July 1876, the following observations were made :—

On the summit of Venlaw, near Peebles, the Aneroid stood at 28·6 inches, and the thermometer at 56°. In Albany Street, Edinburgh, 175 feet above sea-level, the Aneroid stood at 29·53 inches, and the temperature of the air was 61°.

Work by Table.

Feet corresponding to 28·6 = 2196

" " " 29·53 = 1324

Approximate Difference 872

Correcting for temperature, we have $56 + 61 - 100 = 17$.

Then $872 \times 1\cdot017 = 886\cdot824$ feet = Difference of Height

Add for Height of }
lower station, . } 175

Venlaw above }
Sea-level, . } 1062 feet.

The Ordnance Survey made the height 1066 feet.

